



**MARYLAND GREEN BUILDING COUNCIL  
MEETING SUMMARY  
MDOT HEADQUARTERS  
26 FEBRUARY 2014**

**Attendees:**

Tom Liebel – MDGBC  
Stephen Gilliss – DGS  
Meg Andrews - MDOT  
David Costello - MDE  
Anja Caldwell – MDGBC  
Mimi Wright-MDGBC  
Soren Graae – DBM  
Christine Varney – MDGBC

Joan Cadden - DGS  
Kristen Ahearn - MEA  
Caroline Varney- Alvarado - DHCD  
Mark Beck - USM  
Prescott Gaylord - MDGBC  
Anne Raines - MDP  
Prescott Gaylord – MDGBC  
Lisa Ferretto - MDGBC

**Guests:**

Neal Fiorelli – Lorax  
Andrea Schoaf – Lorax  
Chris Parts- AIAMD  
Lorraine Doo- USGBCMD  
Mary Pulcinella - USGBC MD  
Sabrina Harder - USGBC MD

- I. Chairman Tom Liebel brought the meeting to order. Introductions of all attendees followed.
  - A. Several new members to the Council were introduced. Lisa and Christine fill the vacancies left by Denise Watkins and Rich Truitt.
  - B. Lisa Ferretto is a Baltimore native and an Architect with HCM where she is sustainability coordinator.
  - C. Christine Varney is a Civil Engineer with JMT where she is also sustainability director.
  - D. Anne Raines is the new designee MDP taking the place of Dan Baldwin. She is with the Maryland Historical Trust.
- II. Chairman Liebel requested a move to approve the meeting summary from the December 18, 2013 meeting. Motion was made and the meeting summary was approved.
- III. Stephen Gilliss spoke briefly about the status of House Bill 207 which would enable the use of codes in addition to LEED or numerically based green building ratings systems currently used in law to define high performance building.
  - A. The bill as written is currently being opposed by USGBCMD and AIAMD. They originally proposed additional language which would allow local jurisdictions green requirements to dictate especially in the case of schools. After some discussion, they have proposed language which would require any code recommended by the Council to go through a transparent public comment process to allow for input and reconciliation of comments. The Council leadership believes the current open public meeting format is adequate for comment and that the concept of reconciliation of special interests is not in the best interest of the

Council in creating a progressive code for use. The Council has also added these organizations to its email list and will share drafts of any codes being proposed in the interest of open dialogue. A meeting is scheduled with Delegate Morhaim on March 4, 2014 to work this out. Hopefully the issues will be resolved in time for the Government Operations Subcommittee being held on March 6, 2014.

1. Anja Caldwell had watched the first hearing proceedings and was very upset and embarrassed that these organizations had opposed the bill at the last minute without any communication with the Council and noted that representatives were present and recognized by the Chair at the December meeting of the Council. She noted that she was a former member and proponent of the USGBC and LEED. Adding that she believes the Council is owed an apology, she believes that the code (IgCC) offers a better way forward in prescribing our green buildings than LEED.
- B. Stephen also talked about a Council website. He noted that while it sounds simple, the process of starting a website in a state agency is not. The site would have to be consistent with all other State websites. DGS currently pays another agency to manage a website for another in-house council. The MDGBC has no funds to do this. We are working on gaining access to the current DGS website to be able to post meeting summaries and other items and are hoping that an upcoming overhaul of the DGS website will allow the Council to have its own site.

IV. Chairman Liebel introduced Neal Fiorelli of the Lorax Partnership to give a presentation on LEED V4.

- A. Neal has an admitted love/hate relationship with LEED. He has been involved in the certification of over 105 buildings of all types in all versions of LEED.
  1. LEED V3 came out in 2009 and brought with it an online certification process.
  2. Professional accreditation has also changed. Neal was accredited in 2003 when it was easy and just one test. There are now 100,000 accredited professionals and 5,000 certified projects.
  3. Accreditation has since been broken out and LEED Green Associate title was created for LEED knowledge but not the intensity of certification.
  4. V4 was controversial, had lots of issues and was finally introduced in 2013.
  5. By 2015 the expectation is that half of the new construction market will be green buildings.
- B. Energy, water conservation and building performance are more the focus of V4
  1. In the past the numbers have all been based on theoretical models. Actual verification has not really been happening as the effort and cost to do so are high.
  2. LEED EB has been difficult to measure as many buildings are not metered as they need to be.
  3. V4 looks more at how performance is monitored and improved upon.
- C. Materials focus is also improved on. More emphasis on real embodied energy and life cycle analysis from cradle to cradle.
- D. Other areas of improvement pushed by V4 include:
  1. Technical rigor
  2. Expanding market sectors
  3. Simplicity
  4. Improved credit weighting – a bike rack no longer equals an energy credit.
  5. Improving integrated design
  6. Improved user experience for the LEED user.
- E. Creative tension between LEED and the market drives its improvement. The market drives the urgency to improve.

- F. Impact categories are simplified to system goals. The website explains some of the particulars of the new system including revised system goals and credits.
- G. V4 had 6 public comment periods with 22,000 comments which is far more than previous versions. The intent was for this to be LEED 2012 but it took until late 2013 for it to finally be rolled out.
  - 1. There was significant market push back in some areas.
  - 2. The bike rack issue
  - 3. There were issues with steel as recycled material vs. real life cycle analysis.
- H. LEED has had impact on the construction market
  - 1. LEED was a primary driver in the building a market for low VOC paints and other products. Eventually the industry and competition began to drive itself.
  - 2. Construction recycling has become much more common due to LEED. The industry continues to move strongly in that direction.
- I. The Location and Transportation credit has become a new category.
- J. The rating system organization has changed to create more ways to adapt LEED to find the right system for your building.
- K. Changes to the documentation
  - 1. Improved the user experience
  - 2. Cost is not as much an issue
  - 3. 80% reduction in paperwork and forms to improve performance and consistency.
- L. There is now a process for Pilot Credits
  - 1. For a new technology or practice a pilot credit can be added to be tested.
  - 2. If successful the credit can be moved into the rating system.
- M. Because of the learning curve LEED 2009 (V3) will remain active for registration until July 1, 2015. V4 will continue to develop. Overall, the rigor makes for greener buildings while the complexity has been reduced.
- N. The Integrative Design Process
  - 1. This has been around for a while and has been the intent for LEED buildings.
  - 2. As an example, lighting, paint colors, daylighting, cooling and heating are all tied together in the Integrative process along with getting the stakeholders/users involved.
  - 3. This has become a credit in V4.
  - 4. With this, USGBC has evolved to be part of the collaborative process. Reviewers can get involved early on to interact to scope out issues and problems. LEED 2009 was not interactive between the designers and USGBC.
  - 5. This has reduced the review and certification time significantly. Neal has had some reviews completed in 20 days.
- O. Energy under LEED V4 has a total of 19 credits available which can be enough to move a project from Silver to Gold to Platinum
  - 1. The energy model used is theoretical and should be used as a tool to improve the performance of the entire building not just the mechanical system.
  - 2. Once the basic model has been built changes can be made in insulation, glass, orientation, building envelope etc. to improve the building performance.
  - 3. The building should be made to perform first. Then the building can be conditioned at which time performance can be improved through the system design.
  - 4. This approach can also lead to lower first costs.
  - 5. Water savings can also be modeled
- P. Location and Transportation now links credits for an overall credit. For example, a bike rack must now tie into a bike riding network so that the credit has some meaning. There is also more measurement of transportation usage in V4.
- Q. Sustainable sites includes some changes
  - 1. Light pollution credit has changed. BUG (backlight, up light, glare) rating is used. Even, non-glare lighting is the best.

2. The term storm water management is no longer used. It is now known as rainwater management.
- R. Water efficiency now includes process water and more metering for individual water usage. This will help manage water use.
- S. Energy credits are now based on ASHRAE 90.1- 2010 as well as a minimum Energy Star score of 75.
1. This version of ASHRAE is being used across the board these days, however.
  2. Tom Liebel noted that Maryland already has the IEC 2012 which already uses this ASHRAE.
  3. Building level energy metering is now a requirement.
  4. Energy Demand Response is also now a credit if the building is enrolled.
- T. Materials and Resources
1. V4 uses more of a life cycle thinking approach
  2. Architects will need to get back into the game of specifying and not leaving so much to the contractor as is the current practice.
  3. To make this work the marketplace will need to respond and manufacturers will need to provide more disclosure...for example not all low VOC products meet LEED. They will also need to disclose properties such as organic vs. synthetic. Tom Liebel noted that life cycle is challenging as it is in the IgCC as well. Andrea Shoaf said that LEED is recognizing Athena sustainable Materials Institute but that it is cumbersome to use. LEED is hoping more players get in the game and that the market rises to the occasion...if not, V4 will need some more tweaking.
  4. Peter Doo noted that larger A/E firms and the AIA are requiring more material declarations from manufacturers. He believes that pushing for more material health information and declarations will make it happen.
- U. Indoor Air Quality – there are not a lot of changes here but minimum indoor air quality performance is now a prerequisite.
- V. Time for questions and comments
1. Tom L. noted that we will need to look at the Council's transition from LEED 2009 to V4. Neal responded that after the first comment period it was somewhat scary but he is not seeing that so much now, although he has not submitted a V4 project yet.
  2. Anja has a lot of questions
    - a. She is concerned that having both versions out there becomes a big administrative issue out there. Who are the reviewers now? Neal responded that it is still the GB Certification institute (GBCI).
    - b. Who are the certifiers and what are their qualifications? Peter Doo responded that they tend to be practicing architects and engineers. Tom said they are insourcing more reviewers.
    - c. What are the criteria for being a certifier? Tom said that he 3<sup>rd</sup> party certification has been good with LEED. That we will need to be thoughtful in getting the right certifier under IgCC. Neal responded that you have to be careful about giving the reviewer too much credit and power. As for the IgCC he does not know of a jurisdiction that has the capacity to review.
    - d. Anja believes that putting so much emphasis on the 3<sup>rd</sup> party reviewer implies that the A/E is incompetent. We need to make sure the 1<sup>st</sup> and 2<sup>nd</sup> parties are competent.
    - e. Stephen Gilliss noted that under the IgCC the information submitted is much simpler than under LEED.
    - f. Anja asked how is LEED working overall on energy? Tom L. said we really need more tracking. Neal said that 70% of projects don't fall under an energy measurement mandate but his clients continue to track their usage. The M+V criteria for what you measure is important

- g. Stephen noted that with the State's Energy database the next step is to try to bring in the modeling to check performance against.
- h. Lisa Ferretto noted LEED v 2009 introduced MPRs, Minimum Program Requirements. MPR # 6 states: "All certified projects must commit to sharing with USGBC and/or GBCI all available actual whole-project energy and water usage data for a period of at least 5 years." The easiest way for most projects to do this is through Energy Star Portfolio Manager. In LEED v4, they just renamed this MPR 6 to a prerequisite, "Building-level energy metering."
- i. Anja still doesn't see the feedback on energy performance that is needed. If the USGBC itself collects performance data in the LEED process, like Lisa stated, the critical step is not to just collect the data from the projects, but analyze it appropriately, and share the outcomes accordingly. The amount of LEED registered or certified buildings in Maryland itself is no indicator of their actual benefits to the State and environment. What the MD Green Building Council urgently needs is a performance review of all the Maryland LEED buildings built to date. Only this will determine if the legislation and LEED mandate has indeed been beneficial and shows the desired outcomes- or if a course correction is in order. The Local MD USGBC Chapter could request this data from the national USGBC office and provide it to the Council.

### 3. End of discussion

## V. Tom opened up the floor for "Once Around the Table".

- A. Mimi Wright noted that she was recognized for her forestry efforts from by the Dorchester Citizens for Planned Growth. The award was presented, recognized her overall efforts.....marsh restoration, invasives control, etc. in addition to forestry. It was the first time a woman received the award. She has also applied for a permit to do a living shoreline project at her farm in Dorchester County's Fishing Creek. The structure would largely be constructed of local wood.
- B. David Costello noted that the stormwater utility fee is not being repealed.
- C. Anne Raines noted that the MD Historical Trust is receiving funding for Hurricane Sandy projects which could be used for related historic rehabs and for sea rise protection projects. A press release is coming out soon.
- D. Lisa Ferretto said that she has a Green Events Baltimore Webpage and can post any events members might want to be on the site. See <http://greeneventsbalTIMORE.com/>

## VI. The meeting was adjourned at 12:00PM. The next meeting location is scheduled for March 26, 2014 at 10 AM in Room 150 of the Lowe House Office Building.

The preceding is intended as a summary only of the discussions held on this meeting date. Council members are requested to review the summary and notify the writer of any errors, omissions or unintended misrepresentations of the discussion.